

CLAIMS:

1. A seat structure, comprising:
a flat spring member disposed in such a manner that one end is in
5 engagement with an arbitrary frame member to be displaced backward by
backward moment, which deforms a seat back under an impact force from
front or back equal to or stronger than that prescribed, and the other end is in
engagement with a frame member disposed in the vicinity of the front edge of
a cushion frame,
10 wherein the flat spring member increases in tension as said seat back
is deformed.
2. A seat structure, comprising:
a cushion frame provided with a frame member deforming under an
15 impact force from front or back equal to or stronger than that prescribed; and
a flat spring member disposed in such a manner that one end thereof is
in engagement with an arbitrary frame member to be displaced backward
along with deformation of a seat back by backward moment applied to said
seat back, and the other end is in engagement with the frame member
20 disposed in the vicinity of the front edge of the cushion frame,
wherein the flat spring member increases in tension accompanied by
deformation of said seat back to perform a function to increase the intensity of
the backward moment of the seat back.
- 25 3. The seat structure according to claims 1 or 2, wherein the arbitrary
frame member engaged with one end of said flat spring member and

displacing backward by the backward moment toward said seat back includes a frame member composing a back frame.

4. The seat structure according to claims 1 or 2, wherein the arbitrary
5 frame member engaged with one end of said flat spring member and
displacing backward by the backward moment toward said seat back
comprises the frame member elastically supported in an independent state
from the back frame, and provided at a position corresponding to the vicinity
from the haunches to the waist, along the width direction of the seat.
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5. The seat structure according to claim 4, wherein the arbitrary frame
displacing backward by backward moment toward said seat back comprises a
frame member composing said cushion frame, and is supported by an arm
biased in a direction of backward tilt under a normal state by means of a
15 torsion bar disposed along the width direction at a position to be deformed by
an impact force equal to or stronger than that prescribed to said seat back.
6. The seat structure according to claims 1 or 2, further comprising:
a stopper to control deformation of the cushion frame and the back
20 frame under an impact force from front or back equal to or stronger than that
prescribed.
7. The seat structure according to claim 1 or 2, wherein said flat spring
member comprises one kind selected from a two-dimensional net member and
25 a three-dimensional net member or a combination of two kinds or more
thereof.

8. The seat structure according to claims 1 or 2,

wherein said cushion member comprises one kind selected from a two-dimensional net member, a three-dimensional net member and a urethane material or a combination of two kinds or more thereof, and is disposed above the flat spring member in such a manner that one end thereof is in engagement with the arbitrary frame member to be displaced backward along with deformation of the seat back by backward moment applied to the seat back and the other end is in engagement with a frame member disposed in the vicinity of the front edge of the cushion frame.

9. The seat structure according to claim 8, wherein said cushioning member comprises a three-dimensional net member formed by connecting two layers of front and back of ground knitted fabrics with connecting yarn.

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10. The seat structure according to claim 9, further comprising:

a portion without connecting yarn at the arbitrary position between one end and the other end of said three-dimensional net member where no connecting yarn is provided and the ground knitted fabrics directly face each other.

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